

**ABSTRACT**

A one frame image of a moving image formed by producing tomographic images of an object to be examined is displayed (S2), a mark is superposed on a designated portion of a tissue the movement of which is tracked in the displayed one frame image (S3), a cutout image of a size including the designated portion is set in the one frame image (S4), local images are searched in another frame images of the moving image and a local image of the identical size which is most coincided with the cutout image is extracted (S5,6), and a coordinate of the designated portion after movement is calculated based on a coordinate difference between the most coincided local image and the cutout image (S7), thereby the movement of tissue is quantitatively measured.